



PATENT  
Customer No. 22,852  
Attorney Docket No. 05725.0903-00000

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	)	
	)	
Shinichi YAMADA et al.	)	Group Art Unit: 1617
	)	
Application No.: 09/857,495	)	Examiner: Gina C. YU
	)	
Filed: June 28, 2001	)	Confirmation No.: 5364
	)	
For: COSMETIC COMPOSITION	)	
COMPRISING AT LEAST A	)	
CATION, A LIQUID FATTY	)	
ALCOHOL AND AT LEAST A	)	
CERAMIDE TYPE COMPOUND	)	
AND METHOD USING SAME	)	

**Mail Stop Appeal Brief--Patents**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**REPLY BRIEF UNDER 37 C.F.R. § 41.41**

Pursuant to 37 C.F.R. § 41.41, Appellants present this Reply Brief to the Board of Patent Appeals and Interferences in response to the Examiner's Answer dated September 8, 2006 ("Answer").

**I. Status of the Rejections**

In response to the Appeal Brief filed June 22, 2006 ("Appeal Brief"), claims 19, 20, 27-33, 52-54, 56-58, 61, 64-66, 69, 72-76, 79, and 82 remain rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,110,450 ("Bergmann") in

combination with U.S. Patent No. 5,198,210 ("Critchley"). Additionally, claims 21-26, 34, 59, 60, 67, 68, 77, and 78 remain rejected under 35 U.S.C. § 103(a) as unpatentable over *Bergmann* and *Critchley* in combination with U.S. Patent No. 6,312,674 ("Maubru"). Further, claims 35-51, 62, 63, 70, 71, 80, and 81 remain rejected under 35 U.S.C. § 103(a) as unpatentable over *Bergmann*, *Critchley*, and *Maubru* in combination with U.S. Patent No. 6,120,757 ("Dubief"). Finally, claims 35-51, 55, 62, 63, 70, 71, 80, and 81 remain rejected over *Bergmann* and *Critchley* in combination with U.S. Patent No. 5,587,155 ("Ochiai").

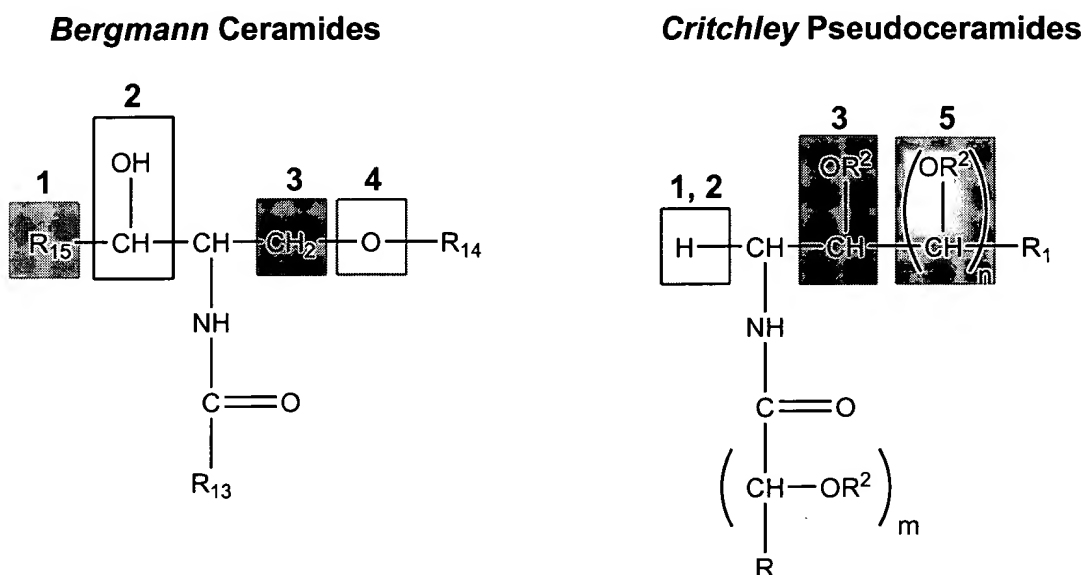
**II. Response to Examiner's Arguments in the Answer**

As noted above, the Examiner maintains all obviousness rejections raised in the Office Action dated May 24, 2005. Appellants maintain their position that a *prima facie* case of obviousness has not been established for reasons of record and for the additional reasons set forth below.

**A. No Motivation for the Combination of Bergmann with Critchley**

In the Answer, the Examiner asserts that *Critchley* "teaches at col. 14, lines 25-30 that the pseudoceramides is [sic] combined with conventional ceramides or other ingredients." Answer at 9. From this, the Examiner concludes that *Critchley* "teaches combining isocetyl alcohol with ceramides." *Id.* Further, the Examiner alleges that "[Critchley] teaches that pseudoceramides are closely related to and mimic the natural ceramides of the skin," although the Examiner points to no support in *Critchley* for this assertion. *Id.*

Appellants disagree. As Appellants previously explained on the record, pseudoceramides and ceramides represent two families of distinct compounds. As emphasized on pages 16-19 of the Appeal Brief, the chemical structure of pseudoceramides, such as those disclosed in *Critchley*, is distinct from the chemical structure of ceramides, such as those disclosed in *Bergmann*. For example, in the figures below, the ceramides of *Bergmann* are juxtaposed with the pseudoceramides of *Critchley*.



As discussed in detail in the Appeal Brief, a side-by-side comparison of the two compounds show that there are at least five key differences between the ceramides taught by *Bergmann* and the pseudoceramides taught by *Critchley*.

The disclosure of *Critchley* serves to further support Appellants' position that pseudoceramides and ceramides represent two families of distinct compounds. Contrary to the Examiner's assertion that *Critchley* teaches a close relationship between ceramides and pseudoceramides, *Critchley* actually discloses that "the degree of skin

benefit attributable to such synthetic ceramides or analogues thereof is limited to the extent that **they do not fully mimic the natural ceramides of the skin.**" Col. 1, lines 23-26 (emphasis added). Moreover, the passage specifically relied upon by the Examiner for the teaching of ceramides supports the position that *Critchley* differentiates between pseudoceramides and conventional ceramides:

"In a further preferred composition, **the pseudoceramide**, or a mixture thereof, **is combined with conventional ceramides**, cholesterol, cholesterol fatty acids, fatty acids, triglycerides, cerebroside, phospholipid and other ingredients well known to those skilled in the art to produce a liposomal dispersion."

Col. 14, lines 25-30 (emphasis added).

Because pseudoceramides and ceramides are recognized in the art as distinct compounds the Examiner must rely on *Critchley's* teaching of the **optional** addition of ceramides or other ingredients. See col. 14, lines 25-30. However, this passage also runs contrary to the Examiner's obviousness position because it clearly identifies that the central teaching of *Critchley* is a composition comprising **pseudoceramides**, with ceramides being regarded as a secondary, optional ingredient. As stated in the *Critchley* "Field of Invention," the "invention relates to novel pseudoceramides, their synthesis and use in compositions for topical application to human skin, hair or nails." Col. 1, lines 5-7. Moreover, the focus of the *Critchley* disclosure is on those novel pseudoceramides. The brief mention of the optional addition of ceramides amidst an entire disclosure directed to pseudoceramides cannot properly be said to satisfy the requirement of a "clear and particular" motivation or suggestion to modify the reference

to arrive at the combination of ceramides with a liquid fatty alcohol, as required by *In re Dembicziak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

Furthermore, with respect to the claimed liquid fatty alcohol, the Examiner alleges that *Critchley*'s teaching of solid and liquid emollients either singly or as mixtures would lead a skilled artisan to understand "that solid or liquid fatty alcohols could be used interchangeably depending on the desired rheology of the composition." Answer at 10. As previously argued, Appellants do not assert that *Critchley* does not teach both solid and liquid fatty alcohols, but rather that the skilled artisan, when relying on the disclosure of *Bergmann* (which teaches only solid fatty alcohols), would have no motivation to pick a liquid fatty alcohol (such as isocetyl alcohol) from among the numerous emollients listed in *Critchley*. Absent any suggestion in *Bergmann* to modify the composition by utilizing liquid fatty alcohols, the Examiner must improperly rely on hindsight, picking and choosing among the elements of the prior art to arrive at the claimed combination. Such picking and choosing, using the present invention as a blueprint, is prohibited. See *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1600, (Fed. Cir. 1988).

For at least the foregoing reasons, Appellants assert that this rejection is legally insufficient and should be reversed.

**B. No Expectation of Success from the Proposed Combination**

Finally, the Examiner has not provided a specific basis on which one of ordinary skill in the art would have expected the ceramides of *Bergmann* to be successfully combined with the liquid fatty alcohol (isocetyl alcohol) of *Critchley*. Following the

Examiner's logic, one skilled in the art must modify *Bergmann's* teaching of ceramides and **solid** fatty alcohols by combining this reference with *Critchley's* teachings of **pseudoceramides** and various fatty alcohols (both liquid and solid). In order to arrive at the presently claimed composition, the skilled artisan must ignore both *Bergmann's* teaching of solid fatty alcohols and *Critchley's* teaching of pseudoceramides. However, neither reference provides any motivation, much less "clear and particular" motivation to make such wholesale modifications to their disclosures. In light of the structural dissimilarity between pseudoceramides and ceramides, as outlined by Appellants herein and in the Appeal Brief, and further in view of *Critchley's* recognition of functional differences between these compounds, one of ordinary skill in the art would have had no reasonable expectation of success in combining the teachings of *Bergmann* and *Critchley* in an attempt to arrive at the claimed invention. Accordingly, Appellants submit that the rejection is legally insufficient and should be reversed.

### III. Conclusion

For the reasons set forth above and in Appellants' Appeal Brief, Appellants maintain that a *prima facie* case of obviousness has not been established based on the cited references. The Examiner has failed to demonstrate (1) that one of ordinary skill in the art would have been motivated to make the combination proposed and (2) that one skilled in the art would have a reasonable expectation of success in such a combination. Thus, Appellants respectfully request reversal of the rejection of claims 19-82 under 35 U.S.C. § 103(a).

If there are any fees due that are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: November 7, 2006

By: 

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